ABSTRACT

A microchip laser arrangement is disclosed. The arrangement is operative to emit Q-switched laser pulses at 1.54 μm. The lasing medium of the laser arrangement is preferably comprised of Yb:Er-glass, and the Q-switch is comprised of a saturable absorber of cobalt doped spinel crystal. The lasing medium is preferably bonded to the absorber to form a monolithic body, upon the surface of which there are deposited dielectric stacks forming a resonant laser cavity. Pumping of the active medium is performed by means of an InGaAs laser diode emitting light at 0.97 μm, corresponding well with the absorption of the Yb:Er-glass material.

(Elected for publication: Fig.1)